

IN THE
UNITED STATES COURT OF APPEALS

No. 22592-A

GEO. J. MEYER MANUFACTURING
CO.

Appellant,

vs.

SAN MARINO ELECTRONIC
CORPORATION

Appellee.

Appeal from the United States District Court
for the Central District of California

APPELLANT'S REPLY BRIEF

SMYTH, ROSTON & PAVITT

ELLSWORTH R. ROSTON
WILLIAM H. PAVITT, JR.
and CHARLES H. SCHWARTZ

4262 Wilshire Boulevard
Los Angeles, California 90005

Attorneys for Appellant

FILED

JUL 5 1968

WM. B. LUCK, CLERK

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1. GENERAL COMMENT UPON APPROACH TO ISSUES ADOPTED BY APPELLEE

Appellee seeks to have this Court consider the issues involving the patent-in-suit in the same backwards and erroneous manner as considered by the District Court (Tr. 2546). Thus, appellee attempts first to press upon this Court the issue of infringement and then the issue of patent validity. Furthermore, the issue of infringement is approached in the manner indicated by the District Court of determining the question of infringement by limiting the specification only to the particular embodiment disclosed and by construing the wording of the claims in the light of this particular embodiment (Tr. 2587-2607, 2644-2650, 2665).

If appellant's invention is limited to the literal wording of the claims (construed with reference to the particular embodiment disclosed) rather than by considering the contribution of the patent over the pertinent prior art, the Court would "place the inventor(s) at the mercy of verbalism and would be subordinating substance to form", and "convert the protection of the patent grant into a hollow and useless thing" in complete disregard of the philosophy of patent protection expounded by the Supreme Court of the United States in the Graver Tank case quoted on pages 53-54 of appellant's main brief.

If appellant's invention is considered in the broad light which is its proper due, appellee infringes the literal wording of the claims. This has been considered in detail in appellant's main brief and will be considered in some detail subsequently in this brief.

2. PROPERLY TO DETERMINE INFRINGEMENT, THE COURT MUST DETERMINE
THE CONTRIBUTIONS OF THE INVENTION TO THE PERTINENT ART

Infringement cannot properly be determined without a clear understanding of the contribution of the invention of the patent to the pertinent art. See: Discussion and authorities infra pages 13-14.

A. The District Court's Findings Concerning the Pertinent
Prior Art are Clearly Erroneous

It is common sense that the contribution of an invention should be evaluated from the standpoint of a person of ordinary skill in the field with respect to the solution of the problems to which the invention is directed. This is implicit in Section 103 of Title 35 whereby patentability is in effect denied "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains". See: Discussion commencing on page 35 of appellant's main brief.

The District Court's initial error lay in its Finding of Fact No. 9 which reads:

"The nature of the art we are here concerned with is the detection of foreign objects in a field of view by electro-optical techniques, rather than being limited to the bottle inspection field." (R. 1941)

This was an arbitrary and artificial classification based only upon the fact that appellees and the Patent Examiner had cited patents in these several fields to show that individual features

of the invention had been employed in these other fields. However, there was no evidence adduced at the trial to support the District Court's Finding No. 9 that the art should be considered as the detection of foreign objects in a field of view by electro-optical techniques rather than being limited to the bottle inspection field. On page 56 of its brief, appellee cites testimony of Ryde and Griest in support of its position. However, the testimony of Ryde on pages 1382-1391 of the transcript relates only to the limited competence of Ryde as an expert witness. Furthermore, the Griest testimony quoted on pages 56 and 57 of appellee's brief from pages 2150-2151 of the transcript was obtained by appellee's counsel, rather than appellant's counsel as indicated by appellee. This testimony involves an assumption by appellee's counsel that there is an optical scanning and detection art, and Griest's conclusion is based upon such assumption. The attempt of Griest in his testimony to convert the Biberman patent from the missile tracking field to the bottle inspection field was completely distinguished on cross-examination (Tr. 2249-2260) when he admitted that he did not understand the production of low frequency signals in the scanning of the bottom of a bottle, such low frequency signals resulting from the scanning of the edge of the bottle. If Griest as an expert in the field of missile tracking did not understand the effect of the edge of the bottle in producing low frequency signals, the Biberman patent could not be easily expanded from the missile tracking field to the bottle inspection field.

The impropriety of considering the art as the detection of foreign objects in a field of view by electro-optical techniques

is also revealed by the testimony of appellee's own witness Stoate, the British inventor who had made a number of inventions in the field of bottle inspection over a period of thirty (30) years. Stoate testified on cross-examination that he had considered television technology in his efforts to solve problems of bottle inspection (Tr. 1934). Stoate apparently never considered the missile or star tracking technology even though he may have disclosed a centered optical system for bottle inspection in British patent 517,229.

Actually, appellee had an opportunity to establish through witnesses experienced in the bottle inspection field that bottle inspection fell into the broad art of the detection of objects in a field of view by electro-optical techniques. Appellee had several opportunities to do this since Calhoun, one of the inventors of the '640 patent, and McConnell, appellant's chief engineer on bottle inspection systems, testified on behalf of appellant, and Husome, appellee's chief engineer, and Stoate testified on behalf of appellee. Whether by design or oversight, appellee failed to question any of these witnesses as to whether a person of ordinary skill in the field of bottle inspection would have looked to the missile and star tracking patents to solve bottle inspection problems, or otherwise consider bottle inspection technology to fall within the broad art of the detection of objects in a field of view by electro-optical techniques.

Appellee has devoted many pages of its brief in an effort to support Finding of Fact No. 10 (R. 1941) and to answer appellant's discussion on pages 38-46 of appellant's main brief

with respect to this Finding. This Finding is to the effect that electro-optical systems for the detection of objects in the sky, material moving on a conveyor, the presence of objects moving on the ground and objects in a container all reside in analogous art. However, as pointed out on page 40 of appellant's main brief, the District Court did not support what was really a conclusion of law (it was, thus, also included as Conclusion of Law No. 6) by factual findings consonant with the test of analogous art. This test was properly set forth by the Court in its Conclusion of Law No. 5 (see: Authorities cited on page 39 of appellant's main brief).

In an effort to rectify this deficiency in the factual findings, appellee attempts to argue from analogies to certain cases and secondly to wander outside of the record before the Court by references to Patent Office publications which were not introduced in evidence before the District Court. For example, appellee makes reference to certain definitions on pages 59 and 60 of its brief. Such use of references not in the record is not proper. Actually, Finding of Fact No. 10 is not supported by the record for the same reasons as discussed above with respect to Finding of Fact No. 9.

In Sperry Products, Inc. v. Aluminum Company of America, 171 F. Supp. 901, 911 (D.C. Ohio, 1959) affirmed in part 285 F.2d 911, 917, 918 (C.A. 6th, 1960), cert den. 368 U.S. 890, 82 S.Ct. 139, 142 (1961), the Court held that two fields were not analogous which were similar to those of bottle inspection and missile tracking. Specifically, the Court held that the use of

pulse echo techniques to detect ionized layers or perturbations in the upper atmosphere was not analogous to the use of pulse echo techniques to detect flaws or perturbations in an article. In both systems, a pulse was transmitted and, when the pulse struck a perturbation such as the ionized layer or the flaw, the pulse was reflected to indicate that there was a perturbation. Both the '640 patent and the Sperry patent relate to the detection of perturbations in an article. The art cited against both the Sperry and the '640 patents comes from the same type of remote art, both relating to the detection of perturbations in the sky. If the use of pulse echo techniques to indicate ionized layers or perturbations in the upper atmosphere is not analogous to the use of such techniques to indicate flaws or perturbations in objects, as held by the Sixth Circuit, certainly any use of scanning techniques in the missile field is not analogous to the use of such techniques in the bottle inspection field. This is particularly true since the Sixth Circuit uses the same tests as this Court to determine whether two arts are analogous.

B. The Invention of the Patent-in-Suit Was Not Obvious to a Person of Ordinary Skill in the Bottle Inspection Art

Of course, after the problems were solved by the inventors of the patent-in-suit, the eminent missileman, Dr. Griest, who could not at the trial explain the reason for the presence of low frequency interfering components in the signal generated by rotating the reticle (Tr. 2249-2260), did testify how obvious it was to detect a particle in a bottle by the same technology as that employed to find an airplane in the

sky and how easy it was to adapt the Biberman system to inspect bottles. However, Griest testified on cross-examination as to the extensive modifications which would be required in the Biberman system to detect particles in a bottle (Tr. 2396-2301). Such testimony of his inability to understand the system of the patent-in-suit and of the modifications required in the Biberman patent would support a finding of unobviousness. Furthermore, someone first had to appreciate that the Biberman system might be so adapted. No one prior to the inventors of the patent-in-suit ever came close to such an appreciation.

Appellee contends that the Patent Examiner, when considering the application for the patent-in-suit, recognized that the spatial filtering system produced by the rotating reticle there shown in the application drawings had some similarities to such systems used in missile and star tracking technology and then cited patents from the latter. Such cannot be taken as persuasive that it was obvious to use such spatial filtering techniques in bottle inspection at the time that the joint inventors conceived and reduced this system to practice.

"...infallible hindsight is much more common than precarious foresight..."

Dempster Bros., Inc. v. Buffalo Metal Container Corp.,
352 F.2d 420, 422 (CCA2, 1965)

"...the law has other tests of the invention than subtle conjectures of what might have been seen and yet was not."

Diamond Rubber Co. v. Consolidated Rubber Tire Company,
220 U.S. 428, 436, 31 S.Ct. 444, 447

On pages 60 and 61 of its brief appellee alludes to the fact that the inventors had some prior experience in the missile tracking field. Any such prior experience is irrelevant since the test of obviousness is determined through the eyes of a person having ordinary skill in the art to which said subject matter pertains, namely bottle inspection.

"All inventors, regardless of their personal skills, are held to this statutory standard." (In re Warner and Warner, 154 U.S.P.Q. 173, 175 (Ct. Customs & Pat. Appls, 1967))

Appellee refers on page 60 to a notation in Calhoun's notebook in an attempt to show that Calhoun appreciated the relationship between the Falcon missile system and the invention of the patent-in-suit. The testimony of Calhoun on page 766 of the transcript is not to this effect. Actually, if the notation in Calhoun's notebook related to any patent, it related to an improvement disclosed in patent 3,081,666 rather than to the invention of the patent-in-suit.

Appellee attempts on page 61 of its brief to make much of correspondence from George Meyer, appellant's president, relating to the significance of some prior publications discovered by Meyer. Appellee characterizes Meyer as a man with ordinary skill in the art. There is nothing in the record to substantiate this since no questions were asked of Meyer as to his background in education or experience and no questions were asked of Meyer as to such correspondence. If Meyer had such skill and if his correspondence with Calhoun had special significance because of

this skill, Meyer's agreeing to make a downpayment of \$75,000.00 and to pay a continuing royalty for the patent-in-suit strongly suggests that he regarded the invention as unobvious. Actually, if anything, Meyer had considerably less than ordinary skill in the art. The questions raised by Meyer in such correspondence were merely those of a businessman concerned about the substantial investment he had made. Furthermore, this question was raised after the invention of the patent-in-suit on the basis of hindsight.

C. The District Court Properly Concluded that, if Biberman Patent is not to be Considered Pertinent Prior Art to the Patent-in-Suit, the Patent-in-Suit is Valid

Appellee finally argues on page 62 of its brief that, even without reference to any missile or star tracking patents, the invention of the patent-in-suit was taught by patents in the bottle inspection field. This is directly contrary to Findings 11(e), 11(f), 12 and 13 by the District Court. None of these Findings has been shown to be clearly erroneous. No patent in the bottle inspection field disclosed or contemplated the combination of rotating a member such as a reticle to provide spatial filtering for separating the frequencies of the signal components representing particles from the frequencies of signal components representing edge and other undesirable effects and for selecting the frequencies of the signal components representing the particle and attenuating the other frequencies. Furthermore, contrary to the contention of appellees on pages 69 and 70 of its brief, Storate patent 517,229 does not teach the

combination of spatial filtering and frequency selection since Stoate's system was a DC system, as Stoate himself admitted (Tr. 2030) and as the Court found in Finding 11(b).

Furthermore, on pages 63-65 of its brief, appellee cites a number of Ninth Circuit cases relating to the test for validity of claims relating to combinations of elements and concludes that appellant's combination does not produce any change in the respective function of the individual elements. This is contrary to Finding of Fact No. 12(a) of the District Court, which found:

"The '640 patent discloses the first system for detecting small particles in the bottom of a bottle while scanning the bottom of the bottle, including the edge of the bottle, without masking the edge of the bottle."

Furthermore, the District Court found in Finding of Fact No. 13:

"Some of the problems specific to the bottle inspection field, including the effects of the edge of the bottle, were neither recognized nor solved by others prior to the filing by the inventors of the patent application which matured into the '640 patent."

The problems relating to the effects of the edge of the bottle are discussed in detail on pages 13 and 41-44 of appellant's main brief. As appellant has indicated in its main brief, no attempt was made prior to the invention of the patent-in-suit to scan the edge of the bottle, particularly since the effects of the edge of the bottle tend to completely overshadow the effects of a particle in the bottom of the bottle.

Appellee contends on pages 68 and 69 of its brief that appellant's machine did not enjoy "commercial success" because the machine marketed by appellant was not the same as that disclosed in the '640 patent. This is contrary to the finding of the District Court in Finding 12(c) and such Finding has not been shown by appellee to be clearly erroneous. Actually, the only change in the marketed machine, from that disclosed in the '640 patent, other than in the mechanical handling of the bottles, was the addition of a prism to insure that the machine would be able to detect particles at the center of the bottom of the bottle (Tr. 476-480). This addition of the prism did not affect the basic operation of appellant's machine (Tr. 476-480). Furthermore, if appellee's argument were to be drawn to its logical conclusion, no machine could be ever considered to enjoy commercial success since improvements are constantly being made in every machine.

The District Court recognized in Finding of Fact No. 13 that the patent-in-suit would be valid if the missile and star tracking field could not be considered with the bottle inspecting-field as a single art of detecting objects in a field of view by electro-optical techniques. Appellant has demonstrated that the missile and star tracking field cannot be properly considered as a single art with the bottle inspection field. However, even if the missile and star tracking field can be considered as a single art with the bottle inspection field, the patent is valid since the invention of the patent achieves a new and surprising result in detecting a particle in the bottom of a bottle while scanning the edge of the bottle. The patent-in-suit is

We turn, then, to the issue of infringement.

3. THE DISTRICT COURT'S FINDINGS ON THE ISSUE OF INFRINGEMENT,
BASED UPON ITS ERRONEOUS APPROACH TO THAT ISSUE, WERE
CLEARLY ERRONEOUS

On the issue of infringement, appellee would subject this Court to the myopia of reading only the wording of the claims without the benefit of any understanding of the inventors' contribution to the bottle inspection art or any appreciation of the fact that appellee's machines fully utilize that contribution. Furthermore, appellee has attempted to support its position by conclusions made by its own witnesses on direct examination even though, on cross-examination, such witnesses made admissions directly contrary to their conclusions on direct examination.

While it is true that in many instances a District Court may determine factual issues in arriving at a conclusion as to whether or not there has been infringement (e.g. see Kim Bros. v. Hagler, 276 F.2d 259, 262 (CA 9, 1960) cited by appellee on page 20 of its brief), whether or not infringement exists in many instances may represent a conclusion of law. Thus, see:

Hansen v. Colliver, 282 F.2d 66, 69 (CA 9, 1960)

Pursche v. Atlas Scraper & Eng. Co., 300 F.2d 467,
482 (CA 9, 1961)

Moon v. Cabot Shops, Inc., 270 F.2d 539, 545
(CA 9, 1959)

Lundgren v. Freeman, 307 F.2d 104, 113-115
(CA 9, 1962)

In any event, where the District Court has determined the infringement issue by an erroneous approach, this Court has

experienced no difficulty in finding reversible error.

See: Neff Instrument Corp. v. Cohu Electronics, Inc.,
298 F.2d 82 (CA 9, 1961)

Appellant submits that the District Court adopted an erroneous approach in the case at Bar by: (1) failing first to consider the validity issue whereby it would have had to make a determination of the contribution by the joint inventors to the properly defined art; (2) including missile and star tracking patents in the art which it considered pertinent to the bottle inspection patent in suit and against which the inventors' contribution was evaluated; (3) failing to acknowledge that appellee's machines utilize the inventors' contribution to the bottle inspection art which it should have thus determined; and (4) considering the invention to be limited to the disclosed embodiment and reading the claims literally and with reference to such embodiment - even though the District Court found that the inventors had reduced to practice, prior to filing the application for the patent-in-suit, the techniques asserted by appellee to distinguish the accused machines from the embodiment disclosed in the patent-in-suit.

As a consequence of adopting such approach to the issue of infringement, the District Court made a series of findings, to support a conclusion of non-infringement, which were clearly erroneous.

"Infringement is not a mere matter of words" (Grant v. Koppl, 99 F.2d 106, 110 (CCA 9, 1938), cited in Pursche v. Atlas Scraper & Eng. Co., supra at p. 482). While claim wording is

certainly to be looked to in the first instance (See Graver Tank & Mfg. Co. Inc. v. Linde Air Prods. Co., 339 U.S. 605, 607; 70 S.Ct. 854), "the degree of protection afforded beyond the language of the claims will vary directly with the value of the inventor's contribution of the art" [Judge Learned Hand's opinion in Royal Typewriter Co. v. Remington Rand., Inc., 168 F.2d 691, 692 (CA 2, 1948)], quoted in Nelson v. Batson, 322 F.2d 132, 135 (CA 9, 1963).

Since the missile and star tracking patents typified by Biberman are not pertinent prior art to the patent-in-suit, Finding of Fact No. 5 and Conclusion of Law No. 19 are obviously bottomed upon an erroneous premise, viz. that the patents relating to missile and star tracking are pertinent prior art.

The District Court also proceeded on the premise that it would limit the scope of the patent-in-suit specifically to what was disclosed in the specification and drawings (Tr. 2665). As this Court will appreciate, it would have been impossible even in a book-size volume to have anticipated all of the different variations which were possible within the scope of the invention.

An analysis of several of the District Court's Findings of Fact will illustrate the inconsistent manner in which his Honor proceeded. Thus, Finding of Fact No. 5 in effect indicates that the District Court considered the invention of the patent-in-suit to be limited to the particular embodiment disclosed in the drawings and specifications. What the District Court has thereby done, therefore, is to hold, in effect that

notwithstanding the fact that the inventors of the patent-in-suit were the first to perform bottle inspection by (1) the use of a centered optical system to provide spatial filtering for generating signal components, some of which components are indicative of the presence of a dirt particle, and (2) then selecting those components from other signal components by a particular disclosed electronic technique, the patent is to be limited in scope to the particular embodiment disclosed in the specification.

Hence, appellee has been held not liable for infringement even though it uses a similar centered optical system (which itself was entirely new in its application to the bottle inspection art) to generate signal components by spatial filtering techniques and processes the latter electronically to select the components indicative of a particle (Tr. 567-571, 587-589, 592-596, 1288-1292). Appellee has been held not to infringe because appellee allegedly uses a slightly different electronic technique - notwithstanding the fact that a person skilled in the art would recognize that appellee's system accomplishes the same result by the same means as that specifically disclosed in the patent-in-suit (Tr. 567-571, 587-589, 592-596, 1288-1292). Appellant submits that this is not the "just result" contemplated by Judge Learned Hand in the Royal Typewriter Co. case, supra, cited in this Court's opinion in Nelson v. Batson, supra.

When the findings adopted by the District Court on the question of infringement are viewed in the light of the real and great contribution hereinabove explained, they will

appear to be little more than an ingenious exercise in judicial nit-picking, and clearly erroneous. For example:

In Finding No. 5(d) the District Court states that the patent-in-suit "does not include a disc having a single reflective line with the remainder of the surface opaque". (R. 1940). This Finding is erroneous. When rotated, appellee's scanning member causes pulses to be produced by the photocell in a similar manner and by similar or equivalent means to that produced by scanning members within the concept of the patent-in-suit (Tr. 1760, 1845, 1882). This error is repeated in Finding No. 7 wherein the District Court arbitrarily imposes upon all of the patent claims a limitation that the circular scanning member must have at least two radial opaque areas and two transparent areas. This limitation is imposed notwithstanding the Court's Finding No. 20 to the effect that the inventors, before filing the application which formed the basis of the patent-in-suit, had tried a reticle with a single translucent area. (R. 1947). Since any disc with a single transparent or reflective area will produce the same light chopping effect in a similar manner as a multi-segment reticle (see Ryde and Griest testimony Tr. 1760, 1842-1845, 1882, 2221-2222), Finding No. 7 represents a clearly erroneous denial of equivalence and a further unjustified restriction upon the claims, notwithstanding the basic inventive concept.

The inclusion of a disc with a single transparent or reflective line within the concept of the invention is also clearly evident from the discussion in Column 5, lines 39 to 45, inclusive, of the patent-in-suit. Here it is stated that:

"The essence of these various reticle patterns is that a reticle be positioned and rotated in front of a photocell so that all of the information bearing light or light from the area being inspected passes through the reticle to the photocell and the reticle pattern is such that in the area being inspected any point is scanned by an alternate opaque and translucent area of the reticle."

Literally, even a scanning member having a single transparent or reflective line and a single opaque area would provide a scan of any point "by an alternate opaque and translucent area of the reticle", particularly when the scanning member is rotated through more than one revolution. Furthermore, since by Ryde's own testimony a single-spoke reticle rotating through two revolutions is equivalent to a double-spoke disc rotating through a single revolution (Tr. 1842-1845), any point would be scanned as a practical matter "by an alternate opaque and translucent area of the reticle". Furthermore, appellee's use of a reticle with a single translucent or reflective area and a single opaque area even meets the terminology of such claims as Claim 24 since the total number of areas is 2 and accordingly the member has "alternate radial and opaque areas".

As another example, the District Court limited the patent-in-suit in Finding of Fact 5(a) to the production of alternating current at a single frequency. This Finding is clearly erroneous. For example, the production of signal components at more than one frequency is reflected in the terminology of some of the claims in the patent-in-suit. By way

of illustration, Claim 18 uses the plural term "particular alternating components". Other claims such as Claim 23 use language such as "...a specific frequency range...". Still other claims such as Claim 22 do not use the term "frequency" at all.

Appellee's position is that the patent-in-suit selects a signal at a particular frequency, from the pulse produced by the photocell, to detect a particle at the bottom of a bottle whereas appellee's system detects a particle by the slope - or abruptness - of the pulse produced by the photocell. However, Husome admitted on cross-examination that the slope - or abruptness - of the pulse increased as the high frequency components in a pulse increased (Tr. 1323-1339, 1345-1349). Husome further admitted on cross-examination that appellee selected the signal components at frequencies between 200 and 5000 cycles per second to detect a particle in the bottom of a bottle (Tr. 546-554, 567-570, 1186-1187). As Husome further admitted on cross-examination, differentiation - or slope detection - is a member of the family of frequency discrimination (Tr. 1289-1292). Furthermore, the "RC" circuit used by appellee to provide "slope detection" was well known prior to the filing of the patent-in-suit in the United States Patent Office, as admitted by Griest on cross-examination (Tr. 2271-2272), and was successfully used by the inventors to detect a particle in the bottom of a bottle prior to such filing (Tr. 267, 2371-2374). As Griest further admitted on cross-examination, LC and RC circuits may be used interchangeably to select particular



frequencies although one type of circuit may provide a different degree or characteristic of frequency discrimination over that obtainable by the other (Tr. 2232-2234). On this basis, there is no important distinction between the use of LC circuits in the invention of the patent-in-suit or the use of RC circuits in appellee's machine.

In other words, the slope detection electronic technique used by appellee is actually quite similar to the frequency selection electronic technique of the patent. Thus, not only do appellee's machines employ means equivalent to those of the patent to generate signals with alternating components, some of which represent a dirt particle, but appellee's machines then use an equivalent electronic technique to select the frequency components representing the particle and use these components to trigger a bottle rejecting mechanism.

Appellee further predicates the alleged difference between its system and the patent-in-suit on the basis that the patent-in-suit produces an alternating current (a single frequency) whereas appellee's system produces a pulse. However, Ryde and Griest admitted on cross-examination that a "pulse" is a special form of "alternating current" (Tr. 1745, 2223), and Husome, Ryde and Griest admitted on cross-examination that a pulse had alternating components (Tr. 1295-1305, 1327-1347, 1738-1746, 2223-2224). Ryde admitted on cross-examination that the train of pulses produced by appellee's machine would be similar to that produced by the '640 system so that it would be reasonable to call such pulses "alternating current" if they are designated as "alternating current" in the '640 patent

(Tr. 1744-1745). This is consistent with the testimony of Griest on cross-examination that patent attorneys use the term "alternating current" loosely with the term "pulse" (Tr. 2223). Such constitutes strong proof that any differences between "alternating currents" and "pulses" or between "frequency selection" and "slope detection" are only ones of semantics rather than of substance.

On page 59 of its main brief, appellant has discussed the decision by this Court in the Neff Instrument Corp. v. Cohu Electronics, Inc., 298 F.2d 92 (CA9, 1961) to show that this Court has already held RC and LC circuits to be equivalent. However, on pages 48 and 49 of its brief, appellee has stated that the Neff case is not in point because the Neff case related to filters whereas the present case does not deal with filters. As appellant has shown above and as Husome has admitted on cross-examination (Tr. 546-554, 567-570, 1186-1187), both the RC circuits in appellee's machine and the LC circuit in the patent-in-suit provide frequency selection by attenuating certain frequencies so as to emphasize the selected frequencies. This is consistent with the definition of "filter" in Webster's New Collegiate Dictionary (Copyright, 1961) published by G. & C. Merriam Company of Springfield, Massachusetts. On page 311 of this dictionary, the term "filter" is defined from an electrical standpoint as "An electric circuit so designed that a certain selected range of frequencies is transmitted while other frequencies are almost entirely suppressed". Since the RC circuits in appellee's machine and the LC circuits in the

patent-in-suit are acting as filters as defined by Webster, the Neff case is directly pertinent.

As will be seen from the above discussion and from pages 56-65 of appellant's main brief, appellee's machine does produce alternating current in the relevant sense as taught by the patent-in-suit. Since this is the only basis upon which Claim 22 has been held not to infringe, appellee obviously infringes Claim 22. Furthermore, this constitutes the main basis upon which a number of other claims in the patent have been erroneously held not to infringe.

Appellant has discussed above only two of the findings by the District Court with respect to the issues of infringement. The other findings have been discussed in appellant's main brief. In view of the restricted length required of this brief, appellant will not discuss these findings again in this brief. However, from the foregoing discussion, this Court will see that the District Court has clearly erroneously limited the scope of the claims and the normal meaning of the language of the claims. For example, the term "sequentially and cyclically" in such claims as Claims 7, 22 and 23 obviously refers to a progressive rotation of the scanning member through more than one revolution, as Ryde admitted on cross-examination (Tr. 1821-1826).

We come lastly to the District Court's detailed findings incorporated in Finding of Fact No. 22. At the outset of this finding, the District Court admits that appellee's machines seek the same end result of detecting foreign particles in a bottle as does the machine described in the patent-in-suit, but finds that the means employed are dissimilar in certain

respects enumerated with reference to language of the claims in issue. It is at this point that the District Court's nit-picking reaches its apogee. For example, let us consider each lettered paragraph under Claim 7 of Finding 22.

First referring to paragraph (a), appellee has conveniently underscored the pertinent claim language in its quotations on pages 23 and 24 of its brief. This language is intended to describe the circular sweep of the scanning member at the instant that the bottle is moved near the centered position shown in the patent drawing copied on page 7 of appellant's main brief. When the bottle is moved near the centered position, the language of the claim certainly applies to both the machine embodiment of the patent drawing as well as to appellee's machine, as Ryde admitted on cross-examination (Tr. 1761-1767). However, as may be seen from paragraph (a) of the Court's findings with respect to Claim 9, the District Court attempted to read further limitations into the language of the claim by requiring that the progressive scans of the scanning member at all times include the center of the bottom of the bottle and progressive portions of the periphery of the bottle. Actually, even this is true since each position on the bottom of the bottle in appellee's machine is constantly being scanned either by the mirrored line or the opaque area of the scanning member. At any rate, appellee's scanning member is equivalent to the scanning member of the patent-in-suit since both scan the bottom of the bottle to provide spatial filtering.

Turning next to paragraph (b) under Claim 7, again the pertinent claim language is conveniently quoted on pages

24 and 25 of appellee's brief. Note that the District Court has changed the claim language in Finding (b) with respect to Claim 7 and discusses "the detection circuitry of the SME machines" not being "concerned with rendering a repetitive alternating current signal output at the photocell". Claim 7 says nothing about "detection circuitry" being concerned with rendering a repetitive alternating current signal at the output of the photocell. Rather, the claim recites that the photoelectric scanning means is "constructed and disposed to render an alternating current signal output" under the described condition of the presence of dirt particles. As discussed on pages 17-21 of this brief and on pages 56-65 of appellant's main brief, the photoelectric scanning means in appellee's machine is also constructed and disposed to render an alternating current signal output.

The alleged difference between the production by the electronic circuitry associated with the photocell of an alternating current signal in the invention of the patent-in-suit and the signal in appellee's machine is further explained by the District Court in paragraph (c) under Claim 7. As indicated above, these alleged differences have been discussed in some detail on pages 17-21 of this brief and pages 56-65 of appellant's main brief to show that the differences are largely illusory. The electronic circuitry in the patent-in-suit and the electronic circuitry in appellee's machine produce "an alternating current signal" as this term is used in Claim 7.

The other claim distinctions particularized by the District Court in Finding No. 22 may be shown to be equally



hypercritical and erroneously limiting of the patent, particularly since appellee's machines have appropriated the true contribution of the joint inventors to the pertinent bottle inspection art.

4. SUMMARY

The findings of the District Court on the issues of validity and infringement are clearly erroneous. The finding of invalidity is predicated in part on the finding that the fields of bottle inspection and missile tracking are included within the art of detecting objects in a field of view by electro-optical techniques or are analogous. This finding is erroneous since the fields of bottle inspection and missile tracking are neither analogous nor included within a broad art. However, even if the two fields are analogous, the patent-in-suit is valid since it achieves a new and surprising result in detecting particles in the bottom of a bottle even while scanning the edge of the bottle. This is particularly true since none of the patents in the bottle inspection field discloses or contemplates a system using a centered optical system with a radial scan to provide spatial filtering for generating certain frequency components representing a particle in the bottom of a bottle and other frequency components representing other undesirable effects such as the edge of the bottle and to provide electronic frequency selection for selecting the frequency components representing the particle.

The patent should be given a broad scope in view of its validity rather than being limited, in the manner followed

by the District Court, to the specific embodiment disclosed in the patent. For example, the use by appellee of a scanning member with a single translucent or reflective line and a single opaque area is clearly encompassed within the scope of the patent, contrary to the erroneous finding of the District Court in Finding 5(d). The other Findings by the District Court to limit the scope of the patent are also clearly erroneous, particularly in view of the admissions by appellee's witnesses on cross-examination. Appellee clearly infringes the spirit of the claims and also literally infringes the language of the claims, particularly when such language is given a normal meaning in view of the broad scope of the patent.

DATED: July 3, 1968.

Respectfully submitted,

SMYTH, ROSTON & PAVITT

By

Ellsworth R. Roston
Attorneys for Appellant

C E R T I F I C T E

I certify that, in connection with the preparation of this Reply Brief, I have examined Rule 28 of the Federal Rules of Appellate Procedure, and that, in my opinion, the foregoing Reply Brief is in full compliance with that Rule.

Ellsworth R. Roston

AFFIDAVIT OF SERVICE

The undersigned hereby certifies that three (3) copies of the within Reply Brief were this 3rd day of July, 1968, served upon Martin R. Horn, Esq. of Spensley, Horn and Jubas, Attorneys for Appellee, by enclosing the same in a postpaid wrapper addressed to said attorney at Suite 1400, 6380 Wilshire Boulevard, Los Angeles, California 90048, and depositing the same in the United States mail.

Ellsworth R. Roston

